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a mesh of human + network

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PlexusAV Stream Conversion Gateway

Firmware Version 1.3.0 Release Notes

September 8, 2025 - v1

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Introduction

This document covers software version 1.3.0 of PlexusAV Stream Conversion Gateway. From now on, the Stream Conversion Gateway will be referred to as SCG.

Firmware for all PlexusAV products is aligned, meaning that all devices running 1.3.x firmware will work together seamlessly.

The New Features section highlights the additions introduced since the 1.2.x versions.

Important note:

- **We recommend upgrading the P-AVN Transmitters and Receivers first (to version 1.3.x), followed by the Visual Array, and then the SCG.**

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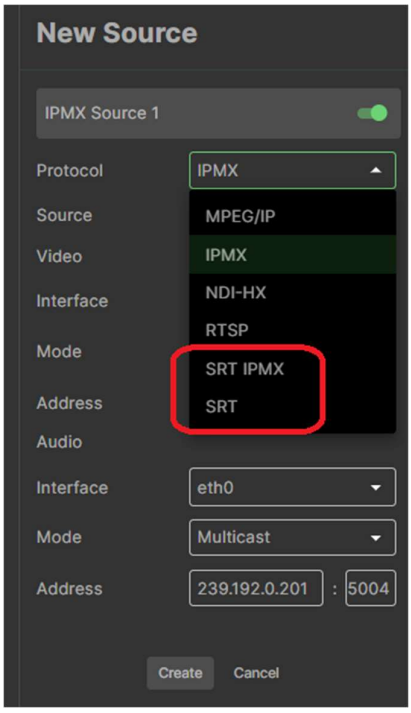
New features

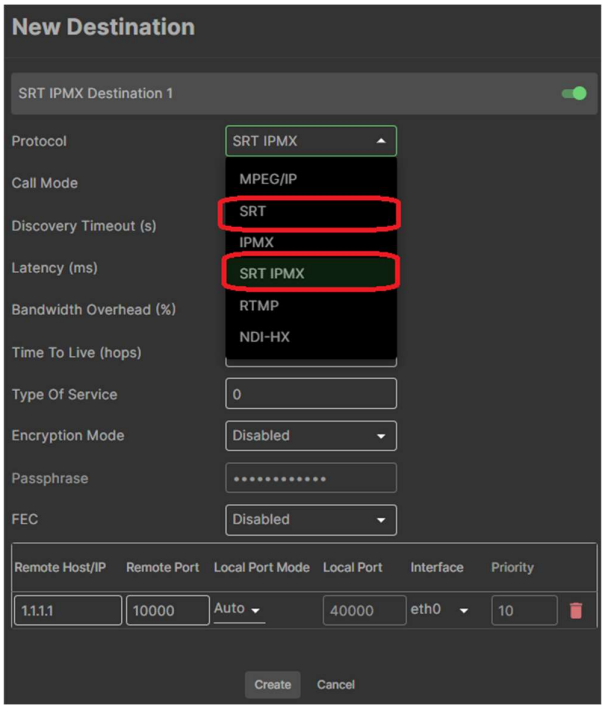
SRT TS Support – Input and Output

In addition to SRT-IPMX (IPMX over Secure Reliable Transport), SCG version 1.3.0 now introduces support for Transport Streams over SRT. In the SCG user interface, it will be referred to simply as SRT.

Most third-party SRT systems are based on Transport Streams. Interfacing with those systems requires the SRT(-TS) output instead of SRT-IPMX.

SRT ate the input and output side (source / destination)





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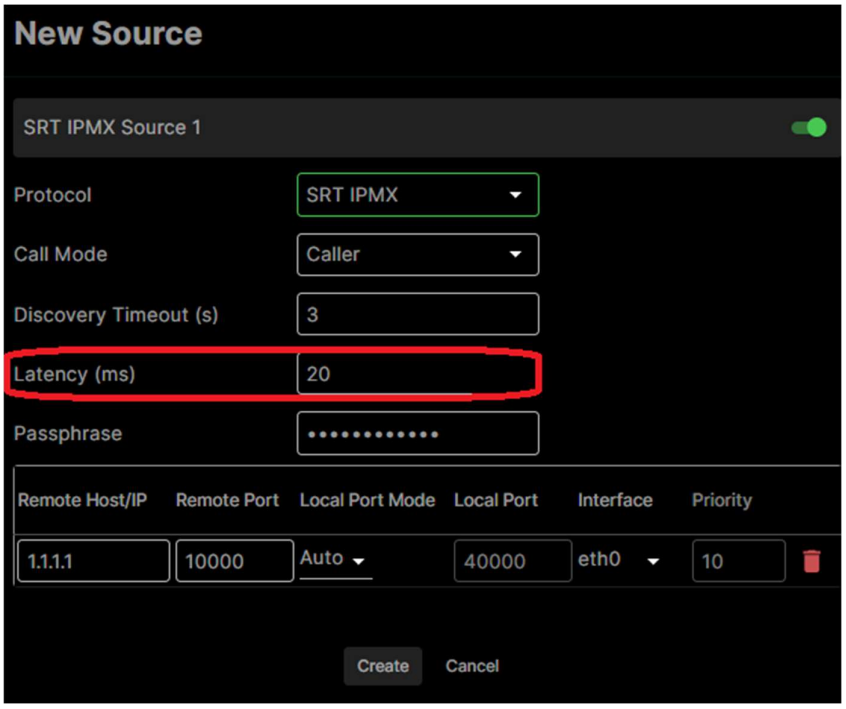
Guideline for choosing the appropriate SRT type:

- **SRT(-TS)**: interfacing with third-party, non-IPMX, SRT sources or destinations.
- **SRT-IPMX**: Use this when sending streams between two Stream Conversion Gateways. Because the raw data is native IPMX, it reduces the CPU load of the SCG and allows for a slightly lower latency value.

Latency for both SRT and SRT-TS can be configured in the SCG (at both input and output)



TS Output

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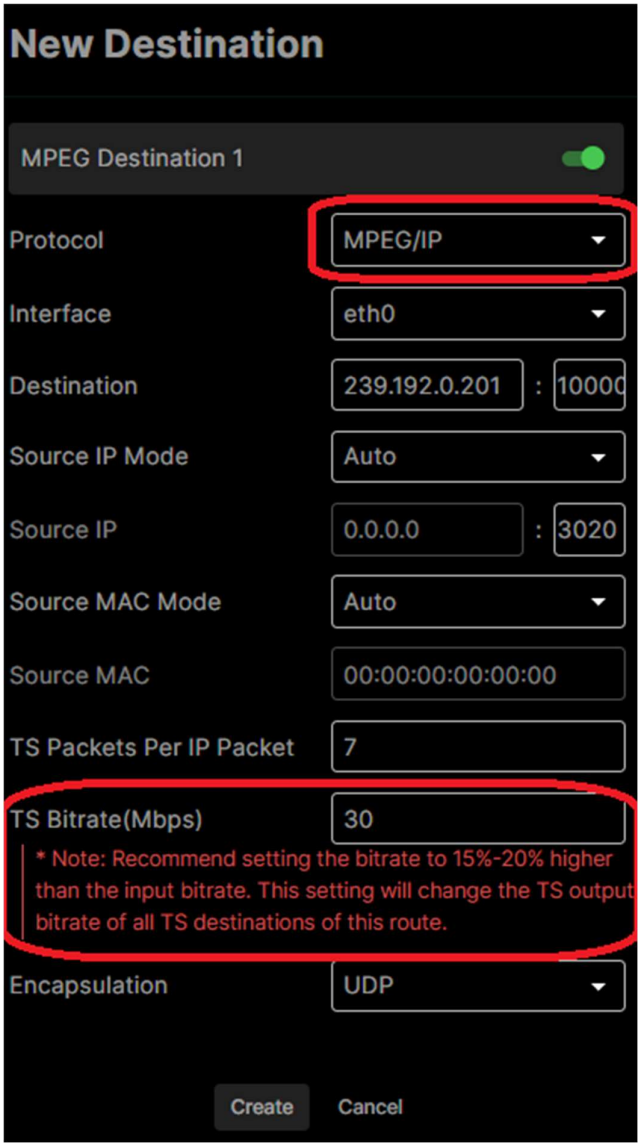
Steam Conversion Gateway 1.3.0 introduces a Transport Stream output. Select “MPEG/IP” as the output protocol (destination)



A warning (in red) will appear related to the Transport Stream bitrate setting.

The Transport Stream (TS) itself uses a constant bitrate (CBR), which must be set here. However, the video inside the TS can use a variable bitrate (VBR).

We recommend setting the TS bitrate to 15–20% higher than the maximum bitrate of the VBR input stream.

In case of a CBR input stream: ENG question: what is the recommendation if the input stream is CBR?

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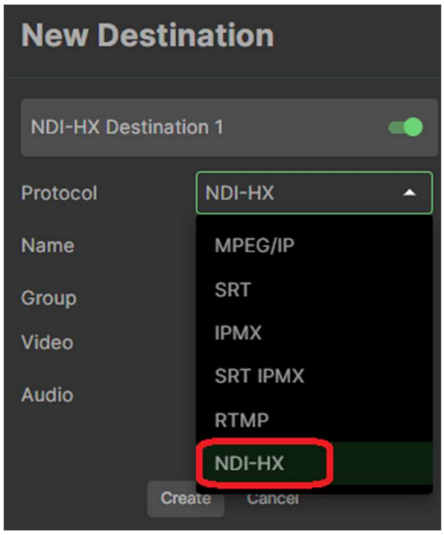
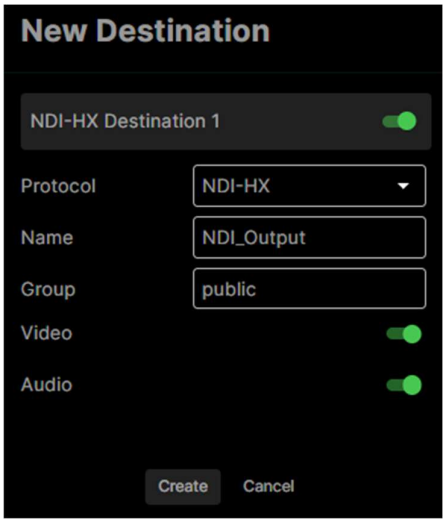
NDI HX2/HX3 Output

Stream Conversion Gateway 1.3.0 brings NDI HX2/HX3 as an output format.



Set the NDI HX output by selecting NDI-HX as an output protocol



Based on the incoming stream format, NDI HX2 or HX3 will be used automatically. You can give the stream a name and add it to an NDI Group.

Bug Fixes

- **Out of order packet on outgoing stream**
  In some cases, the packets of an outgoing SCG stream would be out of order. Resulting in

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frequent decoder stalls on the P-AVN-2 and P-AVN-4.

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Known issues

- **There's no REST API yet**
- **No unicast for TS input and output: more limitations like that?**

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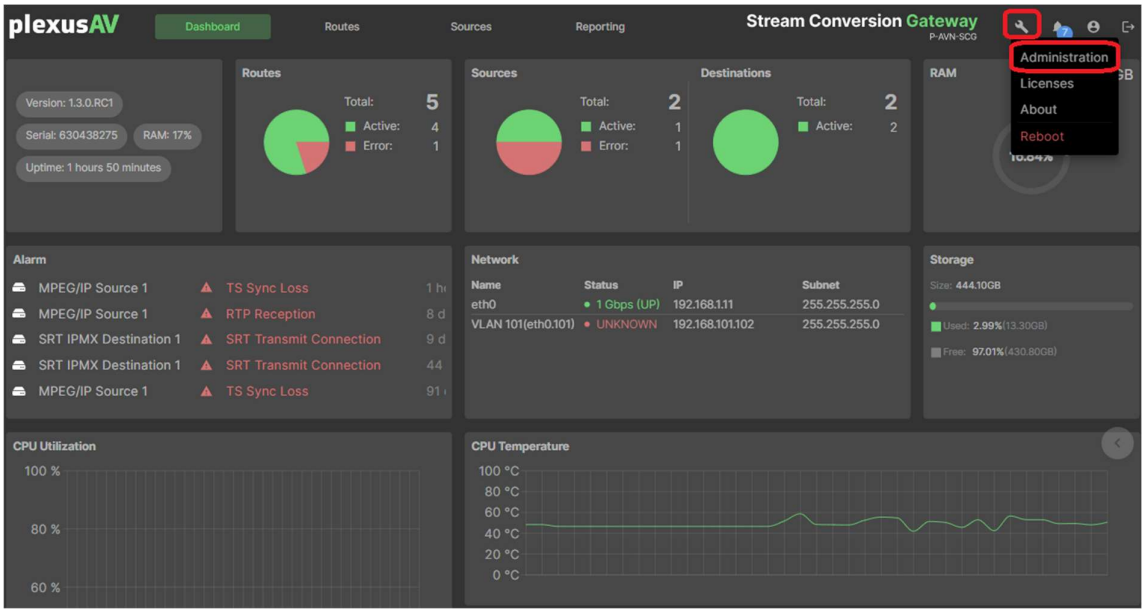
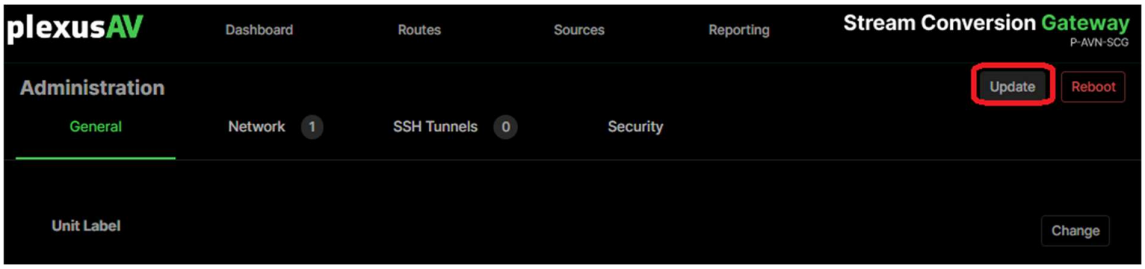
Upgrade procedure

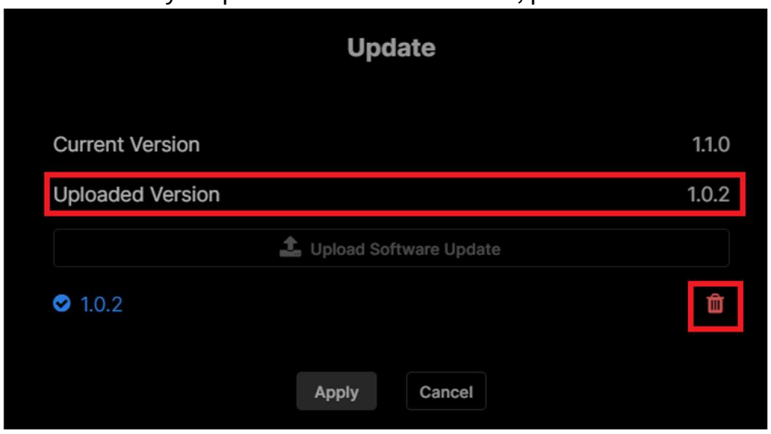
On Stream Conversion Gateway Dashboard, click the “tools icon” in the upper right corner and select “Administration”.



Click “Update”.



If there already is uploaded firmware version, please delete it with by clicking the “bin” icon.



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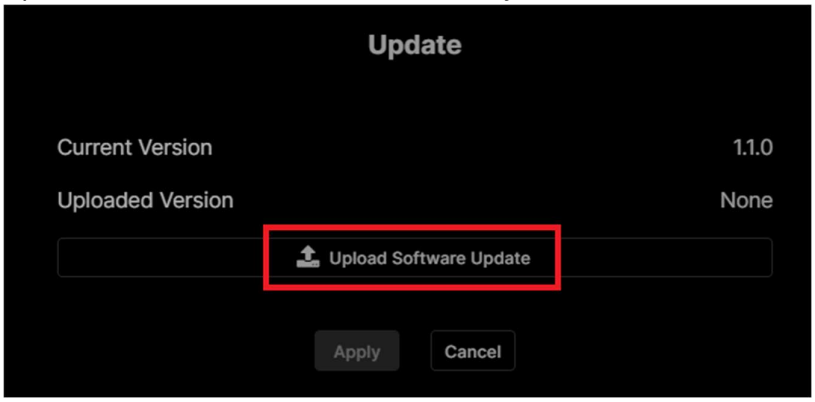
Upload the new Stream Conversion Gateway firmware:



Click “Apply” to apply the new firmware.